

## 12101500 PUYALLUP RIVER AT PUYALLUP, WA

Puget Sound Basin  
Puyallup Subbasin

LOCATION.--Lat 47°12'31", long 122°19'33" referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.20, T.20 N., R.4 E., Pierce County, WA, Hydrologic Unit 17110014, on left bank 0.8 mi upstream from bridge at Clarks Creek, 2.0 mi northwest of Puyallup City Hall, and at mile 6.6.

DRAINAGE AREA.--948 mi<sup>2</sup>.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--May 1914 to current year.

REVISED RECORDS.--WSP 832: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Dec. 3, 1919, at sites 1.2 mi upstream and 900 ft upstream at different datums. Dec. 3, 1919, to Nov. 9, 1935, at site 500 ft upstream at datum 9.61 ft higher.

REMARKS.--Records good except estimated daily discharges, which are fair. All diverted water returned to river upstream of gage. Large part of flow of White River (a tributary) diverted through Lake Tapps (station 12101000). Flood flow regulated by Mud Mountain Lake (station 12098000) on White River. Some pondage on tributaries and upper Puyallup River. Diurnal fluctuations caused by powerplants and glacial melt upstream from station. U.S. Geological Survey satellite telemeter at station. Chemical analyses October 1958 to September 1968, October 1970 to September 1972, October 1974 to September 1994. Water temperatures July 1959 to September 1961, August 1965 to September 1966. Since 1912 the City of Tacoma pipeline diversion from Green River has released as much as 123 ft<sup>3</sup>/s daily, and from 1957-1990 an average of about 15 ft<sup>3</sup>/s per month into Puyallup River 0.5 mi east of McMillin. Since 1990 releases have been minimal.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--94 years (water years 1915-2008), 3,320 ft<sup>3</sup>/s, 2,405,000 acre-ft/yr, adjusted for storage in Lake Tapps since October 1934, and Mud Mountain Lake, October 1944 to September 1947.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft<sup>3</sup>/s, Dec. 10, 1933, elevation, 31.0 ft, present datum; minimum discharge, 306 ft<sup>3</sup>/s, Sept. 25, 1955, elevation, 8.23 ft; minimum daily discharge, 400 ft<sup>3</sup>/s, Nov. 30, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,200 ft<sup>3</sup>/s, Dec. 3, gage height, 19.09 ft; minimum discharge, 963 ft<sup>3</sup>/s, Sept. 29, gage height, 9.87 ft.

## 12101500 PUYALLUP RIVER AT PUYALLUP, WA—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,590	1,370	1,630	1,990	1,650	4,200	2,060	3,190	e6,890	8,400	2,980	e1,740
2	1,770	1,330	2,100	2,140	1,510	3,810	1,940	2,880	e6,450	7,490	3,060	e1,560
3	3,510	1,280	8,560	2,370	1,370	3,390	1,950	2,820	6,470	8,270	2,670	e1,490
4	2,640	1,280	14,000	2,600	1,460	3,180	2,150	3,050	e7,060	7,250	e2,630	1,360
5	1,970	1,280	10,500	2,690	1,770	2,840	2,560	3,560	e6,450	e5,810	e2,770	1,380
6	1,620	1,260	e5,320	2,370	1,890	2,650	2,370	4,410	6,630	e5,730	e2,940	1,530
7	1,920	1,220	e3,560	2,210	1,990	2,490	2,590	4,490	e8,090	e5,100	e2,960	e1,630
8	2,400	1,260	e3,070	2,170	2,290	2,490	2,760	4,310	7,340	4,790	e2,970	e1,820
9	1,920	1,270	e2,700	2,290	5,410	2,480	2,640	3,820	e6,630	4,850	e2,920	e1,840
10	1,830	1,610	e2,590	2,620	5,820	2,510	2,530	3,460	7,090	4,920	e2,590	e1,700
11	1,950	1,660	e2,400	4,130	5,600	3,400	2,510	4,060	7,590	4,560	e2,410	e1,670
12	1,670	1,530	e2,370	4,070	4,720	3,590	2,570	4,190	6,820	4,240	e2,510	e1,590
13	1,500	1,930	e2,210	4,020	4,310	3,570	3,790	3,770	6,340	4,350	e2,590	e1,600
14	1,360	1,660	e2,070	3,580	3,580	4,080	4,450	5,830	6,340	4,470	e2,780	e1,620
15	1,290	1,750	e2,090	3,520	3,120	3,850	4,070	8,790	6,100	4,420	e2,910	e1,510
16	1,290	2,700	e2,030	2,930	2,980	3,550	3,450	9,800	5,950	4,240	e3,040	e1,450
17	1,230	3,380	e1,930	2,610	2,790	3,360	3,080	11,000	5,880	3,980	e3,330	e1,510
18	1,200	3,720	1,850	2,380	2,610	3,440	2,900	e12,700	5,470	3,730	e3,210	e1,460
19	1,660	3,110	2,210	2,230	2,430	3,190	2,790	e11,900	5,120	3,560	e2,910	e1,460
20	3,170	2,630	2,400	2,240	2,370	3,020	2,540	e12,000	5,070	3,500	e3,380	1,760
21	2,970	2,280	2,010	1,920	2,370	2,820	2,390	e12,000	5,750	3,500	e3,510	1,760
22	2,860	2,060	1,950	1,670	2,390	2,590	2,250	e11,500	6,230	e3,590	e2,280	1,620
23	3,040	1,910	2,440	1,620	2,340	2,560	2,170	e9,890	5,710	3,350	e1,990	1,240
24	2,820	1,830	4,150	1,580	2,320	2,900	2,110	e8,860	5,120	e3,230	e2,080	1,110
25	2,580	1,770	3,510	1,470	2,450	2,520	2,020	e8,570	4,900	e3,260	e2,120	1,140
26	2,120	1,690	3,150	1,450	2,540	2,480	1,940	e8,780	4,870	3,240	e1,960	1,110
27	1,880	1,790	2,840	1,640	2,530	2,580	2,040	e8,820	4,960	e3,160	e2,390	1,050
28	1,710	1,700	2,780	1,490	2,660	2,650	2,660	e9,260	5,870	e3,040	e2,810	1,020
29	1,610	1,760	2,570	1,520	3,060	2,550	4,100	e8,850	7,200	e3,010	e2,850	1,030
30	1,520	1,700	2,470	1,520	---	2,420	3,770	e7,890	8,500	3,160	e2,430	1,100
31	1,420	---	2,160	1,590	---	2,240	---	e7,520	---	2,820	e2,020	---
<b>Total</b>	62,020	55,720	105,620	72,630	82,330	93,400	81,150	221,970	188,890	139,020	84,000	43,860
<b>Mean</b>	2,001	1,857	3,407	2,343	2,839	3,013	2,705	7,160	6,296	4,485	2,710	1,462
<b>Max</b>	3,510	3,720	14,000	4,130	5,820	4,200	4,450	12,700	8,500	8,400	3,510	1,840
<b>Min</b>	1,200	1,220	1,630	1,450	1,370	2,240	1,940	2,820	4,870	2,820	1,960	1,020
<b>Ac-ft</b>	123,000	110,500	209,500	144,100	163,300	185,300	161,000	440,300	374,700	275,700	166,600	87,000
<b>Mean adjusted for change in contents in Lake Tapps</b>												
	1,999	1,715	3,380	2,375	2,927	3,048	2,727	7,174	6,297	4,482	2,719	1,430
<b>CFSM adjusted for change in contents in Lake Tapps</b>												
	2.11	1.81	3.57	2.50	3.09	3.21	2.88	7.57	6.64	4.73	2.87	1.51
<b>In. adjusted for change in contents in Lake Tapps</b>												
	2.43	2.02	4.11	2.89	3.33	3.71	3.21	8.73	7.41	5.45	3.31	1.68
<b>In. adjusted for change in contents in Lake Tapps</b>												
	122,951	102,011	207,908	146,060	168,412	187,454	162,275	441,207	374,599	275,675	167,254	85,096

## 12101500 PUYALLUP RIVER AT PUYALLUP, WA—Continued

	Calendar Year 2007	Water Year 2008
<b>Total</b>	1,193,367	1,230,610
<b>Mean</b>	3,269	3,362
<b>Max</b>	19,500	14,000
<b>Min</b>	952	1,020
<b>Ac-ft</b>	2,367,000	2,441,000
<b>Mean adjusted for change in contents in Lake Tapps</b>	3,302	3,364
<b>CFSM adjusted for change in contents in Lake Tapps</b>	3.48	3.55
<b>In. adjusted for change in contents in Lake Tapps</b>	47.29	48.28
<b>In. adjusted for change in contents in Lake Tapps</b>	2,391,208	2,440,902

